LABOR SERVICES DIVISION[875]

Adopted and Filed

Pursuant to the authority of Iowa Code section 89A.3, the Elevator Safety Board hereby amends Chapter 72, "Conveyances Installed On or After January 1, 1975," and Chapter 73, "Conveyances Installed Prior to January 1, 1975," Iowa Administrative Code.

In March 2014, an elevator industry trade publication published a detailed study about children being trapped and seriously injured due to a weakness in applicable codes. The entrapment risk occurs primarily in elevators built to the residential elevator code, and today, elevators built to the residential code are not allowed in buildings under the Board's jurisdiction. However, for a number of years Iowa law allowed residential elevators to be installed in public buildings. It is estimated that there are about 200 residential elevators operating in public buildings in Iowa.

The Elevator Safety Board (Board) studied this issue and effective June 3, 2015, implemented new rules requiring the installation of light curtains. Installation of light curtains proved to be more costly and difficult than was anticipated, and the Board again studied a method to minimize this hazard.

This rule making rescinds the rules requiring light curtains and adopts instead a performance code. This rule making requires that if a door or gate deflects too much with the application of pressure, the door or gate must be repaired or replaced. It also requires that if the distance between the hoistway door or gate and the car door or gate exceeds 5 inches, an unspecified mechanism must be utilized to prevent operation of the elevator if a person is between the doors or gates.

The Board anticipates that many of the residential elevators that were impacted by the rules effective June 3, 2015, will not be impacted by these rules. The rules adopted in 2015 require a light curtain unless the car doors are a solid panel, regardless of the distance between the doors or gates. In some cases, two light curtains are required. Establishing a 5-inch space within which no action is required should reduce the number of affected elevators.

These amendments do not specify the mechanism that must be used to prevent operation of the elevator when a person is between the doors or gates. This discretion should minimize the costs of compliance, as the least-costly, effective mechanism can be chosen.

Keeping door or gate deflection to a minimum is viewed as routine maintenance. Limits on door or gate deflection are contained in many of the elevator codes; however, there are gaps in applicability. These amendments cover those gaps.

The purposes of these amendments are to protect the health and safety of the public and implement legislative intent.

Notice of Intended Action was published in the January 6, 2016, Iowa Administrative Bulletin as **ARC 2356C**. No public comment was received on the proposed amendments. These amendments are identical to the amendments published under the Notice of Intended Action.

No variance procedures are included in this rule. Applicable variance procedures are set forth in 875—Chapter 66.

After analysis and review of this rule making, an impact on jobs may occur. However, these rules are written to prevent a specific hazard to children with a minimum of expense.

These amendments are intended to implement Iowa Code chapter 89A.

These amendments shall become effective on April 20, 2016.

The following amendments are adopted.

ITEM 1. Rescind rule 875—72.26(89A) and adopt the following **new** rule in lieu thereof:

875—72.26(89A) Child entrapment safeguards. This rule applies to a passenger elevator unless it has a car door consisting of a solid panel.

72.26(1) For purposes of this rule, "distance with deflection between the doors or gates" means the distance between the closed car door or gate and the closed hoistway door or gate measured at the greatest perpendicular distance with deflection.

- **72.26(2)** For purposes of this rule, measurements of door or gate deflection shall be made in the manner described by ASME A17.1, section 2.14.4.6.
 - **72.26(3)** Door or gate deflection shall not exceed .75 inch.
- **72.26(4)** If the distance with deflection between the doors or gates exceeds 5 inches, a means shall be provided to disable the elevator if a person is in the space between the closed doors or gates.
 - ITEM 2. Rescind rule 875—73.27(89A) and adopt the following **new** rule in lieu thereof:
- **875—73.27(89A)** Child entrapment safeguards. This rule applies to a passenger elevator unless it has a car door consisting of a solid panel.
- **73.27(1)** For purposes of this rule, "distance with deflection between the doors or gates" means the distance between the closed car door or gate and the closed hoistway door or gate measured at the greatest perpendicular distance with deflection.
- **73.27(2)** For purposes of this rule, measurements of door or gate deflection shall be made in the manner described by ASME A17.1, section 2.14.4.6.
 - **73.27(3)** Door or gate deflection shall not exceed .75 inch.
- **73.27(4)** If the distance with deflection between the doors or gates exceeds 5 inches, a means shall be provided to disable the elevator if a person is in the space between the closed doors or gates.

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